

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-3. (Canceled)

4. (Currently Amended) A substantially pure polypeptide encoded by a nucleic acid molecule which hybridizes under high stringency conditions of hybridization at 68°C in 5x SSC/5x Denhardt solution/1.0% SDS, followed by washing in 0.2x SSC/0.1% SDS at room temperature to a complement of the nucleic acid molecule set forth as SEQ ID NO:2, wherein the polypeptide mediates RNA interference (RNAi).

5-12. (Canceled)

13. (Currently amended) A method of preparing an RNAi agent, the method comprising incubating a dsRNA in the presence of an RDE-1 polypeptide, wherein the polypeptide mediates RNA interference (RNAi).

14-16. (Canceled)

17. (Canceled)

18. (Currently amended) A substantially pure polypeptide encoded by a nucleic acid molecule having at least 80% sequence identity with the nucleic acid molecule set forth as SEQ ID NO:2, wherein the polypeptide mediates RNA interference (RNAi).

19. (Currently amended) The polypeptide of claim 18, which is encoded by a nucleic acid molecule having at least 95% identity with the nucleic acid molecule set forth as SEQ ID NO:2, wherein the polypeptide mediates RNAi.

20. **(Currently amended)** The polypeptide of claim 18, which is encoded by a nucleic acid molecule having at least 98% identity with the nucleic acid molecule set forth as SEQ ID NO:2, wherein the polypeptide mediates RNAi.
21. **(Previously presented)** A substantially pure polypeptide fragment comprising at least 30 contiguous amino acids of SEQ ID NO:3.
22. **(Currently amended)** A fragment of claim 21, wherein said fragment comprises amino acids 203 to ~~1021~~1020 of SEQ ID NO:3
23. **(Previously presented)** A substantially pure protein encoded by the nucleic acid molecule set forth as SEQ ID NO:2.
24. **(Previously presented)** A substantially pure protein comprising the amino acid sequence of SEQ ID NO:3.
25. **(Currently amended)** A substantially pure RDE-1 polypeptide encoded by a nucleic acid molecule which can complement a ~~RDE-1~~rde-1 mutation.
26. **(Previously presented)** A fusion protein comprising a fragment of the polypeptide of any one of the preceding claims and a heterologous polypeptide.
27. **(Previously presented)** The fusion protein of claim 26, wherein the heterologous polypeptide is selected from the group consisting of an immunoglobulin Fc (IgFc) polypeptide, a lacZ polypeptide, a glutathione S-transferase (GST) polypeptide, a six histidine tag polypeptide and a signal sequence polypeptide.